Based on data received from USFS and current habitat trends, the LRMP goals are not being met. The reasons for failure to attain these goals are independent of the Bypass. The construction and operation of the Bypass should not prevent the USFS from meeting its goals if current management limitations are overcome.

PRESCRIBED BURNING ANALYSIS

The overall fitness of a group of RCWs (reproductive success, group size, adult survival) is related, in large part, to the quantity and quality of available foraging habitat. Research on the Apalachicola National Forest in Florida revealed that fitness of RCWs was positively related to abundant herbaceous ground cover, little or no pine or hardwood midstory and moderate densities of large, old pines (James et al. 1997). In addition, long term research in the NC Sandhills indicated that "group size increased with an open habitat structure and increasing density of old growth pines" (Walters et al. 2002). Thus the ability of the CNF to properly manage habitat is vital to the fitness of RCWs. Quality foraging habitat is directly related to increased group size which promotes fitness of the group as a whole and the availability of helpers can lead to greater reproductive success. A study in the West Gulf Coastal Plain showed that RCW "group size appeared to be the primary determinant of fledging success" (Conner et al. 2004). This in turn can lead to increased availability of juveniles that can disperse and fill breeding vacancies in the project area and elsewhere on the CNF (refer to Final Biological Alternatives Analysis for red-cockaded woodpecker and bald eagle impacts, US Highway 70 Bypass (R-1015), Craven County, NC) (JCA 2007).

Habitat quality is directly related to habitat management. Management within and around the project area is already hampered by its proximity to Havelock and by fragmented ownership. Smoke generated by prescribed burning is an ongoing concern on the CNF. Southeasterly and southwesterly winds are common along the NC coast and can "smoke in" Havelock and the MCAS Cherry Point during a prescribed burn on the CNF. Prescribed burning for fuel and midstory control is the preferred tool in the CNF due to the potential effects of herbicides on PETS species that inhabit the area (Gary Kauffman, pers. comm.).